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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------------------|------------------|
| 09/322,352   | 05/28/1999     | CESARE PESCHLE       | 9855-26U1                       | 7870             |
| 570 7:   | 590 08/27/2002 |                      |                                 |                  |
| AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.<br>ONE COMMERCE SQUARE<br>2005 MARKET STREET, SUITE 2200 |                |                      | EXAMINER                        |                  |
|  |                |                      | BELYAVSKYI, MICHAIL A           |                  |
| PHILADELPH   | IA, PA 19103   |                      | ART UNIT                        | PAPER NUMBER     |
|  |                |                      | 1644<br>DATE MAILED: 08/27/2002 | 17               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | <u> </u>  | Application No.                                       | Applicant(s)  |  |  |  |
|---|---|---|---|--|--|--|
| Office Action Summary   |   |   | PESCHLE ET AL.  |  |  |  |
|   |   | 09/322,352<br>Examiner                                |   |  |  |  |
|   | <b></b>   |   | Art Unit  |  |  |  |
|   | The MAILING DATE of this communication app  | Michail A Belyavskyi ears on the cover sheet with the |   |  |  |  |
| Period fo   | •   |   | •   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |   |   |   |  |  |  |
| 1)  | Responsive to communication(s) filed on 11/1  | 0/00, 07/05/01and 6/18/02 .                           |   |  |  |  |
| 2a)□  | This action is <b>FINAL</b> . 2b)⊠ Thi  | s action is non-final.                                |   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |   |   |  |  |  |
| Disposition of Claims   |   |   |   |  |  |  |
| 4) Claim(s) 1-5,7-11,18-32,51-53,69 and 71-100 is/are pending in the application.   |   |   |   |  |  |  |
|   | 4a) Of the above claim(s) is/are withdraw   | vn from consideration.                                | ,   |  |  |  |
| 5)🖂   | Claim(s) <u>1-5,7,8,10,11,18-24,26-30,51-53,69 and 71-82</u> is/are allowed.  |   |   |  |  |  |
| 6)⊠   | 6) Claim(s) 9,25,31,32 and 83-100 is/are rejected.  |   |   |  |  |  |
| 7)  | Claim(s) is/are objected to.  |   |   |  |  |  |
| •   | Claim(s) are subject to restriction and/or  | election requirement.                                 |   |  |  |  |
| Application Papers  |   |   |   |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |   |   |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |   |   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |   |   |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |   |   |   |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  12) The oath or declaration is objected to by the Examiner.   |   |   |   |  |  |  |
| <del></del>   |   |   |   |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |   |   |  |  |  |
| a) All b) Some * c) None of:  |   |   |   |  |  |  |
| 1. Certified copies of the priority documents have been received.   |   |   |   |  |  |  |
| Certified copies of the priority documents have been received in Application No   |   |   |   |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.   |   |   |   |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |   |   |   |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |   |   |   |  |  |  |
| Attachment(s)   |   |   |   |  |  |  |
| 1) Notic  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informa                                  | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) |  |  |  |

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## DETAILED ACTION

The examiner of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Michail Belyavskyi, Group Art Unit 1644, Technology Center 1600

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/18/02 has been entered.

1. Applicant's amendment, filed 06/18/02 (Paper No.16), is acknowledged.

Claims 1-5, 7-11, 18-32,51-53, 69 and 71-100 are pending.

Claims 1-5, 7-11, 18-32, 51-53, 69 and 71-100 are under consideration in the instant application.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 9, 31, 32 and 96 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is apparent that the monoclonal antibody (mAb) 260.4 is required to practice the claimed invention, claimed in claims 9, 31, 32 and 96. The reproduction of mAbs from specific hybridomas is an extreamely unpredictable event. As a required element, the hybridoma producing the 260.4 mAb disclosed on page 40, line 16 of the current application, must be known and readily available to the public or obtainable by a repeatable method set forth in the specification. If they are not so obtainable or available, the enablement requirements of 35 U.S.C. 112, first paragraph, may be satisfied by a deposit of the pertinent hybridomas which produce these antibodies. See 37 CFR 1.801-1.809.

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Applicant asserts that at the time the invention was made this antibody were obtained from Gesellschaft fur Biologische Forschung, GBF, Braunschweig, Germany (page 40, line 18 of the specification as filed) and <u>currently</u> mAb260.4 are sold by Sigma-Aldrich (Exhibit A).

The Office will accept commercial availability as evidence that a biological material is known and readily available only when the evidence is clear and convincing that the public has access to the material. A product could be commercially available but only at a price that effectively eliminates accessibility to those desiring to obtain a sample. The relationship between the applicant relying on a biological material and the commercial supplier is one factor that would be considered in determining whether the biological material was known and readily available. However, the mere fact that the biological material is commercially available only through the patent holder or the patent holder's agents or assigns shall not, by itself, justify a finding that the necessary material is not readily available, absent reason to believe that access to the biological material would later be improperly restricted. Moreover, the concepts of "known and readily available to the public" are considered to reflect a level of public accessibility to a necessary component of the invention disclosure that is consistent with the ability to make and use the invention. Neither concept alone is sufficient. A material may be known in the sense that its existence has been published, but is not available to those who wish to obtain that particular known biological material. Likewise, a biological material may be available in the sense that those having possession of it would make it available upon request, but no one has been informed of its existence (See MPEP 2404.01). The applicant did not make of record any of the facts and circumstances surrounding the access to the mAb 260.4 from Gesellschaft fur Biologische Forschung, GBF, Braunschweig, Germany at the time the invention was made.

4. Claims 97-98 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a New Matter rejection.

The "CD34<sup>-</sup>CD38<sup>-</sup> cells <u>isolated from tissue</u> "claimed in claim 97, first line, represent a departure from the specification and the claims as originally filed and applicant has not pointed out where the support comes from. The specification and the claims as originally field only support CD34<sup>-</sup>CD38<sup>-</sup> cells isolated from human hematopoietic tissue.

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6. Claims 25 and 83 –100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- A) Claim 25 is indefinite and ambiguous in the recitation of "an antibody that is specific for a one of an early marker and late marker". It is unclear if antibody specific for one of an early marker and one of a late marker or only for one of an early marker?
- B) Claims 83 –100 are indefinite and ambiguous in the recitation of "a first early marker" in base claim 83, second line. The metes and bounds of this term is unclear and is not defined by the claim or the specification.
- 7. Claims 1-5, 7-8, 10-11, 18-24, 26-30, 51-53, 69 and 71-82 are allowed.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michail Belyavskyi whose telephone number is (703) 308-4232. The examiner can normally be reached Monday through Friday from 9:00 AM to 5:30 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Michail Belyavskyi, Ph.D. Patent Examiner Technology Center 1600 August 26, 2002

PERVISORY PATENT EXAMINER
FECHNOLOGY CENTER 1600